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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,382	10/14/2004	Matti Hamalainen	4819-4722	2104
27123	7590	11/05/2007		
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			EXAMINER YANG, JIE	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 11/05/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com  
Shopkins@Morganfinnegan.com  
jmedina@Morganfinnegan.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/511,382	<b>Applicant(s)</b> HAMALAINEN ET AL.	
	<b>Examiner</b> Jie Yang	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 17 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Precious Rejection***

Claims 1,4, and 5 have been amended from original claims in view of "applicant argument/remarks" filed on 10/17/2007, and claims 1-11 are pending in application.

The objection(s) of claim(s) 4 and 5, under informalities have been withdrawn in view of the amendment.

The rejection(s) of claim(s) 1-11, under 35 U.S.C. 112, second paragraph has been withdrawn in view of the amendment.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2,4-5, 7, 9-11 are rejected under 35 U.S.C. 102(b) as anticipated by Everett (U.S 5487819, thereafter '819).

Claims 1-2,4-5, 7, 9-11 are rejected on the same ground as stated in the office action of 7/11/2007.

With respect to the amendment in the claim 1, '819 teaches the process operating at generally ambient pressure (Col.6, Line 28-36), which anticipates the amended limitation "at atmospheric

pressure" in the instant claim 1. The rejected on the same ground as stated in the office action of 7/11/2007 is proper.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 6, and 8 are rejected under 35 U.S.C. 103(a) as being obvious over '819.

Claims 3, 6 and 8 are rejected on the same ground as stated in the office action of 7/11/2007.

### ***Response to Arguments***

Applicant's arguments filed on 10/17/2007 have been fully considered but they are not persuasive. See above rejections.

In the remarks, applicant argues that in step "a" of claim 1, '819 does not disclose the leaching of gold with the aid of bivalent copper. In response, the Examiner notes '891 teaches: in the copper electrolytic cell, cupric copper ( $\text{Cu}^{++}$  = bivalent Cu = cupric Cu --note by examiner) may also be produced at anode from any cuprous copper in the anode compartment. The cupric copper is recirculated back to the hcl zone to further assist in leaching of mineral therein. This discussion discloses the leaching of gold with the aid of bivalent copper.

In the remarks, applicant argues that in step "a" of claim 1, '819 does not disclose the feeding of an oxygen-containing gas to the hcl zone (i.e., the gold-leaching zone). In response, the Examiner notes there is no limitation in the instant claim for feeding of an oxygen-containing gas to the hcl zone. '819 teaches air or oxygen is fed to assist in leaching of the mineral. (Col.6, Line 24-27 of '819).

In the remarks, applicant argues that in step "b" of claim 1, '819 does not disclose "keeping the oxidation-reduction potential ... at a value below 650mV and the pH at a value of 1-3". In response, the Examiner respectfully disagrees. '819 teaches The overall copper leaching is 99% with 98% of the gold leached in the hcl zone (Col.16, Col.25 to 41 of '819). Actually, the oxidation-reduction potential and pH are result-effective variables in term of gold leaching, which is evidenced by '819. '819 teaches oxidation potential versus electrical energy input for three different electrolytes; for curve 2, the area under the curve between +600 to +1000mV (Ag/AgCl) represents the storable energy in soluble form which can be used for the leaching of, for example, gold... (Fig.4, and col.8, line 36-61 of '819); and one of ordinary skill would be able to optimize the oxidation-reduction potential and the pH, for example, keeping the oxidation-reduction potential at a value below 650mV and the pH at a value of 1-3 as demonstrated by '819 to obtain best gold leaching result. SEE MPEP 2144.05.II.

In the remarks, applicant argues that in the rejections for the claims 3, 6, and 8, '819 does not disclose each and every element of claim 1, as a result, there is no prima facie case for claims 3, 6 and 8. In response, please refer to the rejection for claim 1 and discussions above. '819 teaches limitations in claim 1. '819 teaches the ranges of

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the pH value and the temperature of the electrolyte, which overlap ranges of the pH value and the temperature of the electrolyte as claimed in the instant claim 3 and 6, separately. The discussion for air or oxygen as equivalent of oxygen-enriched air (for the rejection of claim 8) please refer to the rejection under 35 U.S.C. 103(a) as being obvious over '819 as stated in the office action of 7/11/2007.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-2701884.

The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY

